



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

July 23, 2003

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: Alcoa Automotive, Indiana Assembly and Fabrication Center 033-17352-00056

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4 (d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (b) the interest of the person making the request;
- (c) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

July 23, 2003

Mr. Tony Highe
Alcoa Automotive, Indiana Assembly and Fabrication Center
1101 Oren Drive
Auburn, Indiana 46706

Re: Re-Registration:
No.: 033-17352-00056

Dear Mr. Highe:

The application from Alcoa Automotive, Indiana Assembly and Fabrication Center, received on June 2, 2003, has been reviewed. The letter notified that an aluminum extrusion facility located at 1101 Oren Drive, Auburn, Indiana, formerly owned by RAMCO Manufacturing Company, has transferred ownership to Alcoa Automotive, Indiana Assembly and Fabrication Center. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emission units, to be located at 1101 Oren Drive, Auburn, Indiana, are classified as registered:

1. One (1) natural gas-fired billet heater, #2, capacity 10.5 mmBtu/hr, connected to #2 log furnace stack, height 20 feet above ground, diameter 2.5 feet inside.
2. One (1) natural gas-fired billet heater, #3, capacity 4.5 mmBtu/hr, connected to #3 log furnace stack, height 20 feet above ground, diameter 2.5 feet inside.
3. One (1) natural gas-fired building heater, capacity 7.87 mmBtu/hr, connected to #3 air rotation unit.
4. An aluminum extrusion facility, involving the machining of aluminum parts, including: sawing, drilling, milling, and deburring of parts.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Pursuant to 326 IAC 6-3-2 (Process Operations) and 40 CFR 52 Subpart P:

The particulate matter (PM) emissions from the aluminum extrusion operation, with a process weight rate of 1000 pounds per hour, is limited to 2.58 pounds per hour.

Alcoa Automotive, Indiana Assembly & Fabrication Center
Auburn, Indiana

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033-17352-00056

The cyclone shall be in operation at all times the aluminum extrusion process is in operation, in order to comply with this limit.

This registration is a re-registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

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cc: File - Dekalb County
Dekalb County Health Department
Northern Regional Office
Air Compliance - Doyle Houser
Permit Tracking
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name: Alcoa Automotive, Indiana Assembly & Fabrication Center

Address: 1101 Oren Drive

City: Auburn, Indiana

Authorized individual:

Phone #:

Registration #: 033-17352-00056

I hereby certify that **Alcoa Automotive, Indiana Assembly & Fabrication Center** is still in operation and is in compliance with the requirements of Registration **033-17352-00056**.

Name (typed):

Title:

Signature:

Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Re-Registration

Source Background and Description

Source Name:	Alcoa Automotive, Indiana Assembly and Fabrication Center
Source Location:	1101 Oren Drive, Auburn, Indiana 46706
County:	Dekalb
SIC Code:	5051
Registration No.:	033-17352-00056
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Alcoa Automotive, Indiana Assembly and Fabrication Center, formerly known as RAMCO Manufacturing Company, relating to the operation of an aluminum extrusion facility.

Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

- (1) One (1) natural gas-fired billet heater, #2, capacity 10.5 mmBtu/hr, connected to #2 log furnace stack, height 20 feet above ground, diameter 2.5 feet inside.
- (2) One (1) natural gas-fired billet heater, #3, capacity 4.5 mmBtu/hr, connected to #3 log furnace stack, height 20 feet above ground, diameter 2.5 feet inside.
- (3) One (1) natural gas-fired building heater, capacity 7.87 mmBtu/hr, connected to #3 air rotation unit.
- (4) An aluminum extrusion facility, involving the machining of aluminum parts, including: sawing, drilling, milling, and deburring of parts.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration No. 033-4962-00056, issued on November 21, 1995.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on June 2, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations from combustion sources.

Emissions from aluminum extrusion:

From data submitted by source, potential to emit of PM = PM-10 = 4.38 tons per year.

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	4.58
PM-10	5.18
SO ₂	0.1
VOC	0.6
CO	8.4
NO _x	10.0

HAP's	Potential To Emit (tons/year)
Single HAP	Negligible
TOTAL	Negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_x is less than 25 tons per year but greater than 10 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.

County Attainment Status

The source is located in Dekalb County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Dekalb County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The potential to emit of all criteria pollutants from this source is less than 250 tons per year, and it is not one of the twenty-eight (28) listed source categories. Therefore, 326 IAC 2-2 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Dekalb County and the potential to emit of all pollutants are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this aluminum extrusion facility will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations) and 40 CFR 52 Subpart P

The particulate matter (PM) from the aluminum extrusion shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 1000 pounds per hour, the PM emissions from aluminum extrusion is limited to 2.58 pounds per hour or 11.3 tons per year.

The cyclone shall be in operation at all times the aluminum extrusion process is in operation, in order to comply with this limit.

The potential to emit of PM is less than the allowable limit. Therefore, the source is in compliance with 326 IAC 6-3-2.

Conclusion

The operation of this aluminum extrusion facility shall be subject to the conditions of the Registration No.: 033-17352-00056.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Heaters****Company Name: Alcoa Automotive, Indiana Assembly & Fabrication Center****Address City IN Zip: 1101 Oren Drive, Auburn, Indiana 46706****CP: 033-17352****Plt ID: 033-00056****Reviewer: Madhurima D. Moulik****Date: June 6, 2003**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

22.9

200.6

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr						
	0.2	0.8	0.1	10.0	0.6	8.4

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 7/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

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See page 2 for HAPs emissions calculations.

update (corrected date) rlm 3/03

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Heaters****HAPs Emissions****Company Name: Alcoa Automotive, Indiana Assembly & Fabrication Center****Address City IN Zip: 1101 Oren Drive, Auburn, Indiana 46706****CP: 033-17352****Plt ID: 033-00056****Reviewer: Madhurima D. Moulik****Date: June 6, 2003****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.106E-04	1.204E-04	7.523E-03	1.805E-01	3.410E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.015E-05	1.103E-04	1.404E-04	3.811E-05	2.106E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.